ABSTRACT OF THE DISCLOSURE

A semiconductor device comprises a channel of a first conductive type formed on a surface layer of a semiconductor substrate, source and a drain of a second conductive type formed on both sides of the channel, a gate insulation film with a first relative permittivity formed at least on the channel directly or through a buffer insulation film, a gate electrode formed on the gate insulation film, and a side insulation film formed at least on a side of the gate insulation film and having a second relative permittivity which is smaller than the first relative permittivity, and, when assuming that an area of the gate insulation film, which is adjacent to the surface layer on a gate electrode side, is S1, and an area thereof, which is adjacent to the surface layer on the channel side, is S2, the area S1 is larger than the area S2.